



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,419	01/10/2002	Stefan Blomgren	HPX0072-PCT	8781
28970	7590	01/13/2006	EXAMINER	
PILLSBURY WINTHROP SHAW PITTMAN LLP 1650 TYSONS BOULEVARD MCLEAN, VA 22102			LOWE, MICHAEL S	
			ART UNIT	PAPER NUMBER
			3652	
DATE MAILED: 01/13/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/030,419

Applicant(s)

BLOMGREN ET AL.

Examiner

M. Scott Lowe

Art Unit

3652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2.5-9 and 17-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21 and 24-29 is/are allowed.
- 6) ☒ Claim(s) 2.5 and 17-20 is/are rejected.
- 7) ☒ Claim(s) 6-9, 22 and 23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/27/05 has been entered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 18 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Davis (US 5,483,876).

Re claim 18, see figure 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2,17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muller (DE 9417837) in view of Davis (US 5,483,876).

Re claims 2,17-20, Muller teaches a method for rapid transfer of a work object in both the horizontal and vertical directions using a robot unit having a gripping mechanism 20, the workpiece weighing between one kilo and forty kilos. The object is transferred in the horizontal direction 1 to 10 meters along a beam member 12; the robot 14 controlled by a control unit and driven by a single belt 22 and at least 2 motors 32, 40 comprising rotor unit connected to the drive wheels; the motors immovably arranged in relation to workstations (not numbered) and transfer of the work object done without displacement of the motors; the movement along a pre-programmed path monitored and controlled continuously through registration of the situation of each of the rotors forming part of the motors. Muller is silent on moving a work object beyond the beam end situation, intermediate table and simultaneous transfer. However, Davis teaches a similar device handling an object beyond an end situation and wherein the gripping mechanism 10 moves along the beam and is arranged with at least two gripping units 48,48,52,52 a first gripping unit collecting the work object from the first position and a second gripping unit depositing the work object in a second position beyond a second end situation along the beams each of the first and second gripping units collecting and placing objects simultaneously with the other unit, wherein an intermediate storage 54 for change of place of the work object is effected before the work object is transferred from the first position to the second position, and wherein the first gripping unit collects the work object from the first position and deposits the work

Art Unit: 3652

object at the intermediate storage and the second gripping unit collects the work object from the intermediate storage and deposits the work object in the second position in order speed up production (summary of the invention). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Muller by the general teaching of Davis to handle an object beyond an end situation and wherein the gripping mechanism moves along the beam and is arranged with at least two gripping units, a first gripping unit collecting the work object from the first position and a second gripping unit depositing the work object in a second position beyond a second end situation along the beams each of the first and second gripping units collecting and placing objects simultaneously with the other unit, wherein an intermediate storage for change of place of the work object is effected before the work object is transferred from the first position to the second position, and wherein the first gripping unit collects the work object from the first position and deposits the work object at the intermediate storage and the second gripping unit collects the work object from the intermediate storage and deposits the work object in the second position in order speed up production.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muller (DE 9417837) in view of Davis (US 5,483,876) and Dixon (US 3,958,740).

Re claim 5, Muller is silent on a "teach-in process" but Dixon teaches a "teach-in process" (column 3, 2nd paragraph from bottom) to allow to for easier programming (column 4, paragraph 2). It would have been obvious to one of ordinary skill in the art at

the time the invention was made to have modified Muller by Dixon to have a "teach-in process" to allow to for easier programming.

Claims 2,17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muller (DE 9417837) in view of Kato (4,509,638).

Re claims 2,17-20, Muller teaches a method for rapid transfer of a work object in both the horizontal and vertical directions using a robot unit having a gripping mechanism 20, the workpiece weighing between one kilo and forty kilos. The object is transferred in the horizontal direction 1 to 10 meters along a beam member 12; the robot 14 controlled by a control unit and driven by a single belt 22 and at least 2 motors 32, 40 comprising rotor unit connected to the drive wheels; the motors immovably arranged in relation to workstations (not numbered) and transfer of the work object done without displacement of the motors; the movement along a pre-programmed path monitored and controlled continuously through registration of the situation of each of the rotors forming part of the motors. Muller is silent on moving a work object beyond the beam end situation, intermediate table and simultaneous transfer. However, Kato teaches a similar device handling an object beyond an end situation and wherein the gripping mechanism 16,17 moves along a beam (12,13,etc.) and is arranged with at least two gripping units 17, a first gripping unit 17 collecting the work object from the first position and a second gripping unit 17 depositing the work object in a second position beyond a second end situation along the beams each of the first and second gripping units collecting and placing objects simultaneously with the other unit, wherein an

intermediate storage 32 for change of place of the work object is effected before the work object is transferred from the first position to the second position, and wherein the first gripping unit collects the work object from the first position and deposits the work object at the intermediate storage and the second gripping unit collects the work object from the intermediate storage and deposits the work object in the second position in order to improve speed and reduce size (object and summary of the invention). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Muller by the general teaching of Kato to handle an object beyond an end situation and wherein the gripping mechanism moves along the beam and is arranged with at least two gripping units, a first gripping unit collecting the work object from the first position and a second gripping unit depositing the work object in a second position beyond a second end situation along the beams each of the first and second gripping units collecting and placing objects simultaneously with the other unit, wherein an intermediate storage for change of place of the work object is effected before the work object is transferred from the first position to the second position, and wherein the first gripping unit collects the work object from the first position and deposits the work object at the intermediate storage and the second gripping unit collects the work object from the intermediate storage and deposits the work object in the second position in order to improve speed and reduce size.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muller (DE 9417837) in view of Kato (4,509,638) and Dixon (US 3,958,740).

Re claim 5, Muller is silent on a "teach-in process" but Dixon teaches a "teach-in process" (column 3, 2nd paragraph from bottom) to allow to for easier programming (column 4, paragraph 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Muller by Dixon to have a "teach-in process" to allow to for easier programming.

Allowable Subject Matter

Claims 21,24-29 are allowed.

Claims 6-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Applicant's arguments filed 10/27/05 regarding claims 2,5,17-20 have been fully considered but they are not persuasive.

Applicant argued that Davis is unrelated to the current invention, however, this is not persuasive since both deal with a transfer robot and share a common classification and therefore are related.

Applicant argued that Davis does not read on the newly added limitation "wherein transfer of the work object in the horizontal direction is unobstructed by the robot unit." However, Davis does not obstruct transfer as clearly seen in figure 3. Moreover, Muller is the primary reference and Davis provides only the modifying teaching of handling an

object beyond an end situation with an intermediate storage and two grippers. Therefore the there would not be a transfer obstruction.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).


In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., size of work parts that can be handled) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Scott Lowe whose telephone number is (571) 272-6929. The examiner can normally be reached on 6:30am-4:30pm M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on (571) 272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

msl



EILEEN D. LILLIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600